5

10

15

20

25

30

6

9

### What is claimed is:

- 1. A method for manufacturing a web of paper or paperboard, comprising:
  - forming a base web,
  - drying the base web on the press section of the papermaking machine,
  - drying the base web further on the dryer section of the papermaking machine,
  - setting a base web speed differential, or draw, between the press section and the first dryer cylinder group of the dryer section, and
  - surface sizing at least one surface of the web,

### characterized in that

- the draw is set to 3 % at the highest, and
- a surface size furnish is applied having a solids content of at least 15 % of the total amount of size components and liquid in the furnish.
- 2. The method of claim 1, characterized in that both sides of the web are treated and to at least one side of the web is applied a surface size furnish wherein the proportion of size components in the total amount of size components and liquid is at least 15 % and the ratio of size solids to the total amount size and liquid in the size furnish applied to the two sides of the web are different from each other.
- 3. The method of claim 1 or 2, characterized in that a surface size furnish is used wherein the proportion of size components in the total amount of size components and liquid is at least 20 %, advantageously 25 %.
- 4. The method of claim 1, characterized in that the draw is set to 1 2%.
- 5. The method of any one of foregoing claims, characterized in that a brightener is added to the size furnish.
- 6. The method of any one of foregoing claims 1, 3, 4 or 5, characterized in that both sides of the web are surface sized.

# Best Available Copy

5

15

30

- 7. The method of claim 2, characterized in that the amounts of size furnish applied to both sides of the web are equal but the amounts of water imported to the two sides of the web are different.
- 8. The method of claim 2, characterized in that the amounts of size furnish applied to both sides of the web are different but the amounts of water imported to the two sides of the web are equal.
- 9. A paper or paperboard product comprising a fibrous layer having at least one side thereof treated with a surface size, characterized in that at least 80 %, advantageously 90 %, of the surface size remains atop the fibrous layer.
  - 10. The product of claim 9, characterized in that the size furnish contains a brightener.
    - 11. The product of claim 9 or 10, characterized in that both sides of the web are surface sized.
- 20 12. The product of claim 11, characterized in that the product is a copier paper.
  - 13. The product of claim 11, characterized in that the product is an ink-jet printing paper.
- 25 14. A method for controlling the curl of a web of paper or paperboard, the method comprising the steps of
  - forming a base web,
  - drying the base web on the press section of the papermaking machine,
  - drying the base web further on the dryer section of the papermaking machine,
  - setting a base web speed differential, or draw, between the press section and the first dryer cylinder group of the dryer section, and

## **Best Available Copy**

5

15

- surface sizing at least one surface of the web,

#### characterized in that

- the draw is set to 3 % maximum,
- a surface size furnish is applied having a solids content of at least 15 % of the total amount of size components and liquid in the furnish, and
- in the size furnishes applied to the two sides of the web, the ratio of dry solids to the size components and liquid are different from each other.
- 15. The method of claim 14, **characterized** in that the amounts of size furnish applied to both sides of the web are equal but the amounts of water imported to the two sides of the web are different.
  - 16. The method of claim 14, characterized in that the amounts of size furnish applied to both sides of the web are different but the amounts of water imported to the two sides of the web are equal.